Work Orde				*100	1996*			Page 1			
Item ID: Revision ID:	D3017-	7		Accept	*N900	<b>040</b>			etup Star	1.7	S1*
Item Name:	Lug		•			ear.			Sto	*N	S2*
Start Date: Required Date:	4/30/13 4/30/13	Start Qty: 6.00 Req'd Qty: 6.00	*6* *6*		Cust Item l Customer:	ID:		·			
Reference:	•		n								
Approvals:	Proces	s Plan: MU	Date: 13-05-02	Tooling:	<b>D</b>	ate:		R	kun Star	1/1	R1*
	QC: _		Date:	<b>SPC (Y/N):</b>	D	ate:			Sto	*N	R2*
Sequence ID/ Work Center II	<b>D</b>	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr		Revision Nbr									
D3017		Rev B						×.			
100				0.00							
*100*		FLOW WATER JET						12	ပ		Ae
Waterjet		Memo		0.00					- · ·		13.10.01
FLOW CNC Waterjo	et	I-Cut as per Dwg Rev: Prog Rev:									13 10 0
•		2-Deburr									
110 .		QC2- Inspect parts off m	achine EAI/EAID	0.00						· v	
		QC2- inspect parts off in	actific (Al/FAID	V:00							Λ
*110* QC Quality Control		Memo		0.00				12	_0	***************************************	13.10.01

Quality Control

											DQA:	Dat	e:	
NCR:	⁄es	/ No				WORK ORDER NON-	COI	<b>NFORN</b>	/IANCE / UPD	ATE				
											QA Closed:	Dat	e:	
Work Orde	٠ <u>٠</u>					DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS		
Part f	1 1 1					Rework Scrap Use-as-is Work Order Update  Skid-tube Crosstube Machining Thermoforming Finishing Large Fab Composite			Small Fab Finishing	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier			Engineering Quality Other	
Root					Descri	ption of work order update		Initial	Acti	on	Sign &			
Cause		Date	Step	Qty	C	or Non-conformance	Ch	nief Eng	Descri	ption	Date	Verification	1	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved														
							AUI	LT CATE	GORY		···			
Landi	Landing Gear  Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube			General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread			Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V	ct issing Vrong		ressure/Forced emperature/Cure Veld Vrong Stock Pulled Other		
						Drill Holes		Offset						

Out of Calibration
Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio

Quality Control

											DQA:	Da	te:	
NCR:	Yes	/ No				<b>WORK ORDER NON-</b>	COI	NFORM	MANCE / UP	DATE				
											QA Closed:	Da	te:	
Work Orde	oř.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
VVOIR OIG	٠					Rework	٦		Skid-tube	Crosstube	1	Water Jet		Engineering
Part I	No.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.		Quality
		,				Use-as-is Thermoforming Finishing			Finishing	Rec/Store/Packaging			Other	
NCR I	No.					Work Order Update	Large Fab Composite Supplier							
Root					Descri	ption of work order update		Initial	Ac	tion	Sign &			
Cause		Date	Step	Qty	(	or Non-conformance	Cr	nief Eng	Desc	ription	Date	Verificatio	n	QC Inspector
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Equip/Tooling							Ì							
Operator	Ш						ļ							
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Other		:												
Process														
Supplier						•					•			
Training			1											
Unapproved														
							FAUI	LT CATE	GORY					
Landi	ing (	Gear				General	_	_			<b>-</b>	,		
		Bending			L	Bend	L	Grain			Ovalized		L	Pressure/Forced
	L	Centre N	ot Concer	ntric to (	o/s	BOM/Route	L	Hardwa	re		Over/Under	tolerance		Temperature/Cure
	Cracks Broken/Damaged					Inspecti	on Incomplete		Part Incorre	ct		Weld		
		Crushed/	Crimped			Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/M	issing		Wrong Stock Pulled
		Cuffs				Contamination	Maintenance				Part Moved			
		Heat Tre	at			Countersink	Mislabeled			Positioned \	<b>V</b> rong			
		Inspectio	Inspection Strip in Tube Cut Too Short					Misread	1	Power Loss/	'Surge		Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order April-30-13 2:37:5		1996		*100	1996*			Page 3			
Revision ID:	3017-7			Accept	*N90004	4 <b>010</b> 0	)* Se	tup Star Stop	171	S1*	
Item Name: Lu Start Date: 4/3 Required Date: 4/3 Reference:	30/13	Start Qty: 6.00 Req'd Qty: 6.00	*6* *6*		Cust Item ID: Customer:			Stop	*NS	<b>S</b> 2*	
Approvals: P		n:		_	Date:		Rı	ın Star Stop	, "IVII	₹1* ₹2*	
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID To	ool # Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
150 *150* Packaging		Packaging Memo		0.00			121	· · · · · · · · · · · · · · · · · · ·		DAS 26 9-89	
Packaging			bag with light oil (Vactr	a oil #2), then Stock					13	<del> -</del>  -  -1	
*160*		QC21- Final Inspection -	Work Order Release	0.00			$\mathcal{L}$	Ism	13/11/	'n	
QC Quality Control		Мето		0.00			T)	<i>/</i>	- <u>΄</u> - <u>΄</u> -	-11-7	

										DQA:	Date	:
NCR: Y	es / N	0			WORK ORDER NON-C	ON	IFORM	MANCE / UPI	DATE	QA Closed:	Date	
Marili Orda				· · · · · · · · · · · · · · · · · · ·	DISPOSITION	T			AGAINST DE			
	Part No.  NCR No.				Scrap Machining Small Fa			Crosstube Small Fab Finishing	Prod. Eng. Coor. Quing Rec/Store/Packaging O			
	···					1				]	Jupplier	
Root				1	ption of work order update	1	nitial	Act		Sign &	Varification	OC Inchestor
Cause	Dat	e Step	Qty	· · · · ·	or Non-conformance	Cni	ef Eng	Descr	ription	Date	Verification	QC Inspector
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Equip/Tooling												
Operator						1						
Material	┥ .				•					ļ		
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Other	Щ					İ		ļ				
Process												
Supplier												
Training											}	
Unapproved			<u> </u>			<u> </u>				<u> </u>		
					<del></del>	AUL	T CATE	GORY				*· · · · · · · · · · · · · · · · · · ·
Landi	ng Gear			. —	General				<del></del>	٦	<u></u>	<b>-1</b> .
	Bendi	_		L	Bend	$\vdash$	Grain			Ovalized		Pressure/Forced
	$\vdash$	e Not Conce	entric to	o/s	BOM/Route	$\vdash$	Hardwa			Over/Under	<del>-</del>	Temperature/Cure
	Crack				Broken/Damaged	$\vdash$	•	ion Incomplete		Part Incorre	<u> </u>	Weld
	Crush	ed/Crimped	i		Burrs		Instruct	tions Incomplete/U	Jnclear	Part Lost/M	issing	Wrong Stock Pulled
	Cuffs Contamination						Mainte	enance		Part Moved		

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Countersink

Cut Too Short Drill Holes

Drawing

Finish

Folio

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Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

April-30-13 2:37:52 PM

Work Order ID:

100996

Parent Item:

D3017-7

Parent Item Name:

Lug

**Start Date: 4/30/13** 

Required Date: 4/30/13

Start Qty: 6.00

Required Qty: 6.00

**Comments:** 

IPP: B03.05.09ReformatKJ/RF

IPP Rev:C 08-04-11 now made on water jet DD verified by:EC

IPP RevB: as per

revB DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4130NS.049 4130 Sheet .049		Purchased	No			100	sf	128.2903	0.102	**************************************	- Ae	13 · 1	0.0
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT020		128.290263							
				11612	2	4.2							
				12304	19	17.340263						_	
				12428	33	106.75			12	<u>4283 ·</u>	<b>→</b> 1	.2	

												DQA:	Da	ate:	
NCR:	Yes	/ No				WORK ORDER NON-O	COI	NFORM	MANCE / UP	DATE		•			
								_			QA	Closed:	Da	ate:	· .
Work Ord	or.					DISPOSITION			AGAINST DEPARTMENT/P						
Work Ord	٠					Rework	1		Skid-tube	Crosstube	1		Water Jet		Engineering
Part '	No.					Scrap	1		Machining	Small Fab	1	Proc	d. Eng. Coor.		Quality
				<del></del> -	<del></del>	Use-as-is	1		noforming	Finishing	F		e/Packaging	-	Other
NCR	No.					Work Order Update	1		Large Fab	Composite	1	•	Supplier	-	
							_		-						
Root					Descri	ption of work order update		Initial	Ac	tion	Si	ign &			
Cause	<b>.</b>	Date	Step	Qty	(	or Non-conformance	Ct	nief Eng	Desc	ription		Date	Verification	)n	QC Inspector
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Operator															
Material		ļ i	<b>.</b> .					,			1				
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						F	AUI	LT CATE	GORY						
Land	ing (	1			_	General	_	7			_			_	1
	$\perp$	Bending				Bend		Grain			┥	lized		$\perp$	Pressure/Forced
	L	Centre N	ot Conce	ntric to	o/s	BOM/Route	_	Hardwa	re		-1	-	tolerance		Temperature/Cure
	<u> </u>	Cracks				Broken/Damaged		Inspect	ion incomplete	<u></u>	Part	Incorrec	ct .	$\vdash$	Weld
		Crushed	'Crimped			Burrs		Instruct	ions Incomplete/	Unclear	Part	t Lost/Mi	ssing	L	Wrong Stock Pulled
		Cuffs				Contamination	<u></u>	Mainte	enance		Part	t Moved			
	L	Heat Tre	at			Countersink	Mislabeled				Positioned Wrong				
1	1	Inspection Strip in Tube Cut To			Cut Too Short	Misread				Pow	ver Loss/	Surge		Other	

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

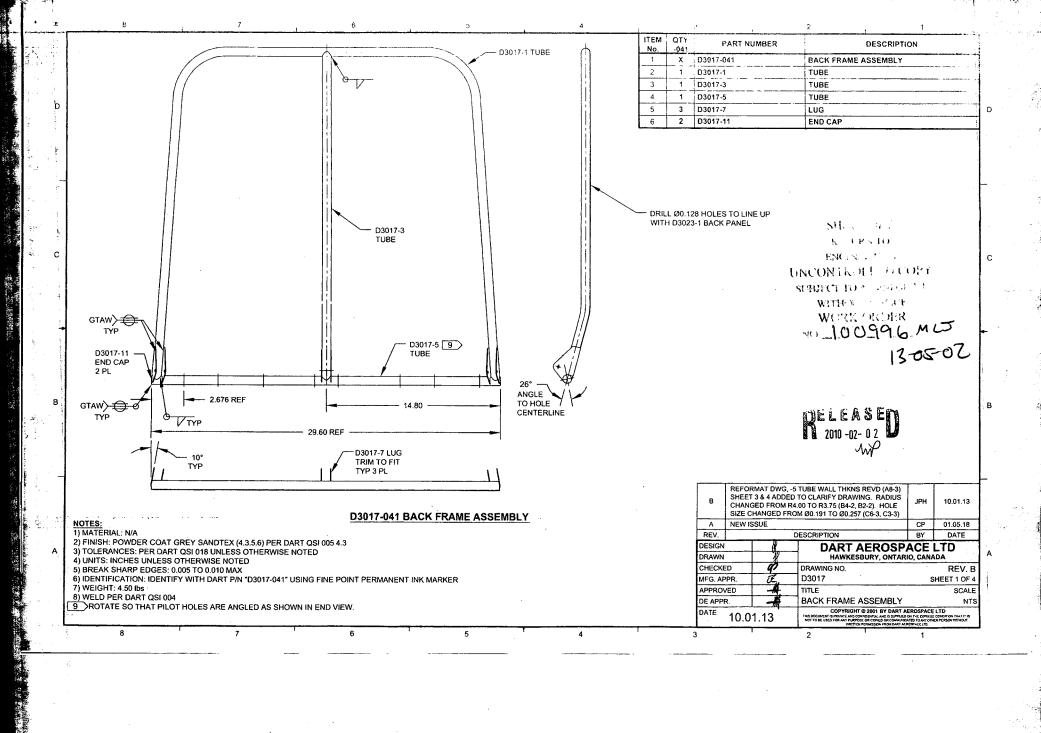
DART AEROSPACE LTD	Work Order:	100996
Description: Lug	Part Number:	D3017-7
Inspection Dwg: D3017 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

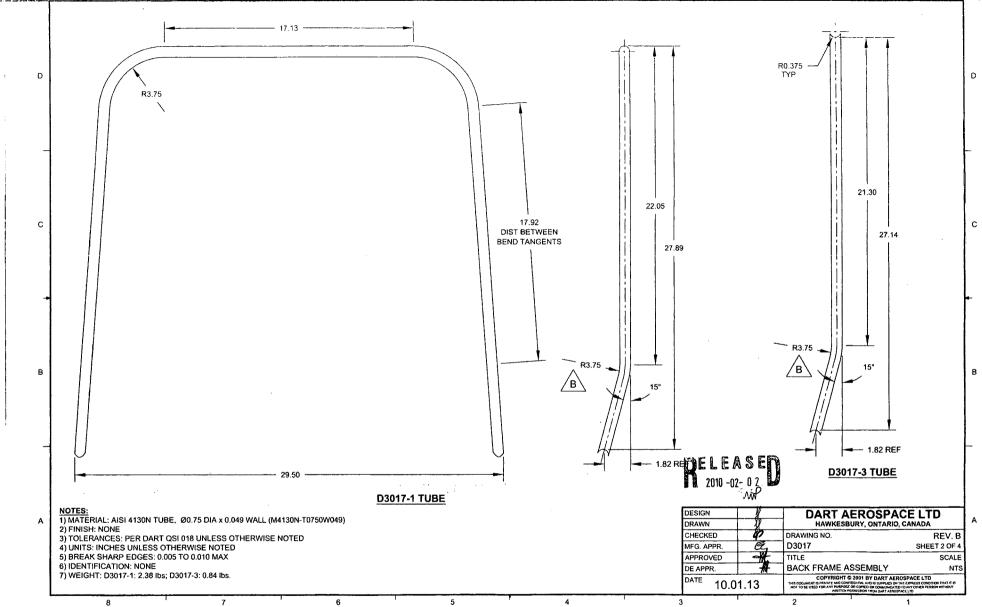
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
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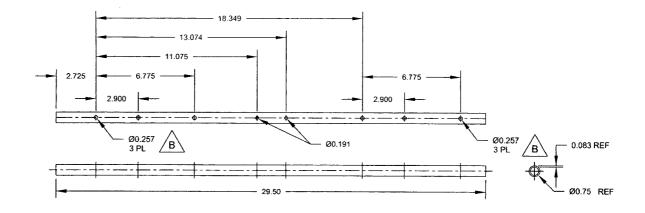
			V 0 3		
Measured by:	A	Audited by:	<b>09</b>	Preliminary Approval:	
Date:	13.10.01	Date:	13-10-01	Date:	

Rev	Date	Change	Revised b	y /	Approved	
_ A	05.03.04	New Issue	KJ/JLM	Λ		7%
В	11.06.21	Dwg Rev updated	KJ q	<b>2</b>	CZM	7
				77	7	



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D3017-5 TUBE

DELEASED 2010 -02- 0 2

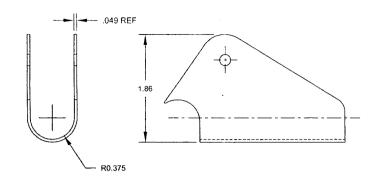
NOTES:

1) MATERIAL: AISI 4130N TUBE, Ø0.75 DIA x 0.083 WALL (M4130N-T0750W083)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

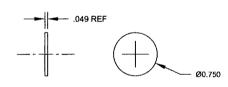
6) IDENTIFICATION: NONE 7) WEIGHT: 0.89 lbs

DESIGN DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWN CHECKED DRAWING NO. REV. B MFG. APPR. D3017 SHEET 3 OF 4 APPROVED TITLE SCALE BACK FRAME ASSEMBLY
COPYRIGHT © 2001 BY DART AEROSPACE LTD DE APPR. NTS DATE 10.01.13

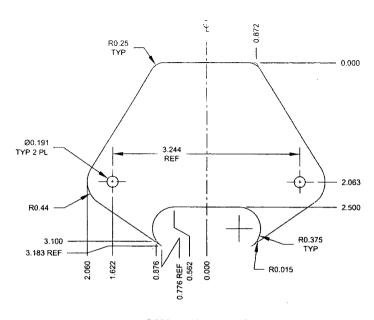
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D3017-7 LUG BENDING DETAIL MAKE FROM D3017-7F



**D3017-11 END CAP** 



D3017-7F FLAT PATTERN PART IS SYMMETRIC ABOUT CENTERLINE



DESIGN	Į.	DART AEROSPACE LTD			
DRAWN #		HAWKESBURY, ONTARIO, CANADA			
CHECKED	q	DRAWING NO.	REV. B		
MFG. APPR	12	D3017	SHEET 4 OF 4		
APPROVED #		TITLE	SCALE		
DE APPR.		BACK FRAME ASSEMBLY	NTS		
DATE 10.01.13		COPYRIGHT © 2001 BY DART AEROSPACE LTD  THIS DOCUMENT IS REPRAITE AND CONFERENCE AND IS SUPPLED ON THE EXPRESS CONCINENT THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR CONFERENCE DOES ON CONFERENCE TO ANY OTHER REPRESON WITHOUT			

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В

NOTES: 1) MATERIAL: AISI 4130N SHEET, 18 GAUGE (M4130N-S049)

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE

7) WEIGHT: -7: 0.12 lbs; -11: 0.01 lbs.